

ELECTRICITY BUSINESS RULES

Appendix C

Balanced Schedule Submission

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Part 1 Introduction

1.1 Purpose

Appendix C sets out the process by which Transmission Customers will submit, update or withdraw schedules with the SO for the delivery of capacity, energy or ancillary services across the Integrated Electricity System (the “IES”).

1.2 Applicability

This Appendix is applicable to all Transmission Customers submitting, updating, or withdrawing schedules with the SO for the delivery of capacity, energy or ancillary services across the IES.

1.3 Scheduling Entity Responsibilities

1.3.1 It is the responsibility of each Transmission Customer that is scheduling delivery of capacity, energy or ancillary services across the IES to:

- arrange the appropriate transmission services to support the schedule;
- submit such schedules electronically;
- adjust or correct said schedules to reflect updated information;
- adjust or correct said schedules to reflect SO postings, requests, and directives;
- respond promptly to any queries from the SO;
- secure and provide to the SO an export permit for exports from Canada;
- secure required NERC E-tag and submit it to the SO;
- secure all other required authorizations; and

all in accordance with the Tariff and the Electricity Business Rules .

- 1.3.2 No Transmission Customer shall submit, update or withdraw schedules at the SO for the delivery of capacity, energy or ancillary services across the IES with respect to another Transmission Customer's schedule other than in the role of a Designated Scheduling Agent in accordance with Section 1.5.
- 1.3.3 No Transmission Customer shall submit, update or withdraw schedules at the SO for the delivery of capacity, energy or ancillary services across the IES with respect to another Transmission Customer's Resource Portfolio other than in the role of a Designated Scheduling Agent in accordance with Sections 1.3.2 and 1.5. A Transmission Customer's Resource Portfolio is comprised of those generation facilities directly owned by the Transmission Customer or those generation facilities for which the Transmission Customer has a contract with the generation Facility owner which grant such authority to the Transmission Customer.

1.4 Confidentiality

Energy schedules shall be treated as Confidential.

1.5 Designated Scheduling Agent

- 1.5.1 A Transmission Customer may designate a person authorized to act on its behalf in respect of all matters relating to Balanced Schedules, or a defined subset thereof. The SO shall recognize such person as the Transmission Customer's Designated Scheduling Agent provided that the SO receives notice of the designation no less than 5 Business Days and no more than 20 Business Days before the date on which the designation is to take effect.

- 1.5.2 A Transmission Customer may withdraw the designation of a Designated Scheduling Agent. The SO shall not give effect to such withdrawal unless it receives notification of the withdrawal no less than 5 Business Days and no more than 20 Business Days before the date on which the withdrawal is to take effect.
- 1.5.3 While the designation of a Designated Scheduling Agent is in effect, the SO shall use reasonable efforts to communicate with a Transmission Customer's Designated Scheduling Agent in respect of all matters relating to the Transmission Customer's Balanced Schedules, or a defined subset thereof, and any such communication shall be deemed to be communication with the Transmission Customer. The SO reserves the right to communicate directly with the Transmission Customer in respect of the Transmission Customer's Balanced Schedules, or a defined subset thereof, and any such communication shall be effective notwithstanding that a Designated Scheduling Agent has been appointed by the Transmission Customer.
- 1.5.4 The act or omission of a Transmission Customer's Designated Scheduling Agent shall be deemed to be the act or omission of the Transmission Customer. As between the SO and the Transmission Customer, the Transmission Customer shall be bound by and fully liable for all acts or omissions of its Designated Scheduling Agent and shall remain solely responsible and liable to the SO for the due performance of its obligations under the Business Rules.

Part 2 Process Description

2.1 Definition of Delivery Points and Points of Receipt

- 2.1.1 Delivery Points are defined by the SO, generally in association with the facility connection process. Delivery Points are generally points of connection on the IES where energy and capacity are injected or withdrawn. In general each Delivery Point corresponds to a connection between a single Facility (including a distribution system) and the IES, or between the IES and an interconnected transmission system.

2.1.2 The SO may define Virtual Delivery Points for either of two purposes:

- To represent Facilities that are embedded in a distribution system or are embedded in another jurisdiction, or
- To represent aggregations of sink Delivery Points within New Brunswick, created by the SO at the request of a Transmission Customer for the purpose of submitting Balanced Schedules.

2.1.3 The SO will make available a table of Delivery Point and Virtual Delivery Point names and definitions that is accessible for use as a menu by Transmission Customers submitting Balanced Schedules.

2.1.4 References in this Appendix to Delivery Points shall where appropriate include Virtual Delivery Points.

2.1.5 References in this Appendix to Points of Receipt are to refer to Points-of- Receipt as defined in the Tariff and as listed on the Transmission Provider's OASIS.

2.2 Requirements for Balanced Schedules

2.2.1 This section describes the requirements for Balanced Schedules. Certain requirements are reflected in the electronic forms and the automatic validation processes operated by the SO. Other requirements may be subject to off-line validation. Any submission of a Balanced Schedule that does not satisfy the requirements may be rejected.

2.2.2 Each Balanced Schedule shall be limited to:

- In respect of a Balanced Schedule for energy, a single 24 hour period from 00:00 to 24:00 Standard or Daylight (whichever is prevailing) as defined by the time zone in which the schedule was submitted (Balanced Schedules for energy may be submitted in the time zone of the Transmission Customer's choice), or
- In respect of a Balanced Schedule for self-supply of Ancillary Service, a single Dispatch Day, the period 00:00 to 24:00 Atlantic Prevailing Time.

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- 2.2.3 Each Balanced Schedule for energy must comprise, for each scheduling interval, the average number of MW to be injected at each defined Point-of-Receipt and the average number of MW to be withdrawn at each defined Point of Delivery or sink Delivery Point. All MW quantities for energy shall be expressed in integer MW and shall be greater or equal to zero. The total MW injection in each interval of the Balanced Schedule for energy must be equal to the closest integer value to 1 plus the applicable transmission loss factor x the total MW withdrawal in that same interval, with half MW rounded upwards. The associated rounding error shall be settled in accordance with the Tariff and the Business Rules. Zero values must be indicated for all intervals of no scheduled injection or withdrawal.
- 2.2.4 Each Balanced Schedule for Ancillary Services must comprise, for each scheduling interval, the number of MW to be presented at each defined Point of Receipt and the number of MW to be available to the system at each defined Point of Delivery or sink Delivery Point. All quantities for ancillary services shall be expressed in multiples of 0.1 MW and shall be greater or equal to zero. Zero values must be indicated for all intervals of no scheduled supply.
- 2.2.5 Each transaction that requires a single NERC e-tag shall be submitted as a separate Balanced Schedule.
- 2.2.6 Any Balanced Schedule submitted for an export from Canada must include information to identify the export permit under which it is covered. Copies of export permits must be provided in advance to the SO.
- 2.2.7 Any Balanced Schedule for a unit contingent export or an export which is intended to be used as a self-supplied Ancillary Service, shall identify the Transmission Customer on behalf of which the Ancillary Service is supplied.
- 2.2.8 In the event that the Transmission Customer for a Balanced Schedule has applied to the SO to be permitted to self-supply one or more Ancillary Services in accordance with the Tariff and the Business Rules, and the SO has approved such request accordingly, then:

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- The Transmission Customer shall include in a Balanced Schedule the Ancillary Services to be provided by each Facility (designated by Point- of- Receipt) in each interval of the Dispatch Day; and
- The Transmission Customer shall not submit a Balanced Schedule in respect of energy that would be in conflict with the scheduled self-supply of Ancillary Services under that same Balanced Schedule, or under any other concurrent Balanced Schedule submitted by that Transmission Customer.

2.2.9 In the event that a Balanced Schedule includes the self-supply of an Ancillary Service by a Load Facility, this self-supplied Ancillary Service is required to be included in the relevant list of self-supplied Ancillary Services, and the Point of Receipt Delivery Point ID must reflect the Delivery Point associated with the particular Load Facility (and not a virtual Delivery Point defined for the aggregation of energy withdrawals).

2.2.10 Unless appropriately flagged as otherwise in accordance with Part 3, Balanced Schedules for import, export and wheeling transactions will be deemed as firm energy transactions, subject to modification by the SO at the SO's discretion on a non-discriminatory basis and in accordance with the interconnection agreement with relevant system operators.

2.2.11 While Transmission Customers are expected to submit Balanced Schedules in respect of their full load forecast, this is not mandated by the Business Rules. It should however be noted that:

- In the absence of any Balanced Schedule accepted by the SO, all withdrawals by a Transmission Customer will be settled as energy variances under the imbalance provisions of the Tariff, and
- Transmission Customers may be required to submit revised Balanced Schedules in order to mitigate changes and contingency events.

2.3 Balanced Schedule Status and Status Indicators

2.3.1 Balanced Schedule submissions made via the SO website shall be flagged as new schedules or as revisions. A reference number will be assigned by the SO at the time of the original submission. Revisions shall bear the same identification number as has been assigned to the original submission. Balanced Schedule submissions made by means other than via the SO website shall be flagged as new or as revision in the submission. This is discussed in the state descriptions below.

2.3.2 New and revised Balanced Schedule submissions are subject to validation to confirm that data entry is complete and appears to conform to requirements. A schedule cannot be submitted until it has completed validation and, when required, must include a NERC e-tag and identification of NEB export permit. Acceptance for inclusion into the scheduling database is automatic until 3:00 p.m. Atlantic Time of the Day Ahead and is discretionary by the SO thereafter.

Acceptance does not imply final approval as this will be subject to review against Dispatch Data etc, and (for inter-Control-Area transactions) check-out.

2.3.3 When a revised Balanced Schedule is accepted, it replaces the previous submission. Until a revised Balanced Schedule is accepted, both the revision and the previous accepted Balanced Schedule will be retained in the database, and will have separate status indicators. The status comment will indicate whether the Balanced Schedule has passed check-out.

2.3.4 The following status indicators are used to communicate status of new or revised Balanced Schedules:

- Empty; the Balanced Schedule has been created and assigned a reference number but the interval MW details have not been submitted.
- Submitted; new or revised submission passed validation and awaiting review by the SO. Until accepted the submission will not be included in assessments and commitment schedules.

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- Accepted Pending Review: new or revised submission passed validation and awaiting review by the SO. The submission was accepted automatically for inclusion in assessments and commitment schedules.
- Accepted; latest submission has been accepted by the SO. The SO has reviewed the submission and verified the e-tag.
- Rejected; the schedule has been rejected by the SO.
- Revision rejected; latest submission to revise the schedule has been rejected by the SO. The indicator Revision Rejected will be displayed for a revised submission.
- Withdrawal Pending; Transmission Customer withdrawal request awaiting review by the SO.
- Withdrawn; Transmission Customer withdrawal passed validation and accepted automatically or by the SO.
- Submitted by the SO; new or revised Balanced Schedules submitted by the SO that has passed validation and awaiting review by the SO. Until accepted the submission will not be included in assessments and commitment schedules.
- Modified by the SO; Balanced Schedule modified from Transmission Customer submission. The status comments will indicate the reason which may be due to check-out failure, a submission on behalf of the Transmission Customer, schedule modified to correct over-committed generation, the schedule has been recalled, etc.
- Insufficient Transmission Capacity; there is insufficient capacity for the latest submission. In respect of a Point-to-Point schedule this indicates insufficient capacity reserved. In respect of a Network Secondary schedule this indicates insufficient capacity at an interface. In respect of a Network Integration schedule this indicates insufficient designated amount from a designated resources.

2.4 Submission of New and Revised Balanced Schedules, and the Means to Withdraw a Balanced Schedule

- 2.4.1 Each new Balanced Schedule submitted by a Transmission Customer and accepted by the SO shall be assigned a schedule number by the SO.
- 2.4.2 Any Balanced Schedule submitted and accepted by the SO in respect of any given Dispatch Day shall stay in effect unless superseded by a revised Balanced Schedule or withdrawn. Provisional Balanced Schedules automatically become Final Balanced Schedules unless superseded by a revised Balanced Schedule or withdrawn by the appropriate deadlines.
- 2.4.3 Any Balanced Schedule submitted by a Transmission Customer and bearing the same schedule number as a previous Balanced Schedule submission shall, on acceptance by the SO, supersede that previous submission.
- 2.4.4 In order to effect withdrawal of a Balanced Schedule, a Transmission Customer may in accordance with the timelines permitted by the Tariff either:
- submit a revised Balanced Schedule with zero values, or
 - submit a request to have the Balanced Schedule withdrawn.
- 2.4.5 Submission of revised Balanced Schedules or withdrawal of Balanced Schedules after 3:00 p.m. Atlantic Time of the Day Ahead (the last Business Day prior to the Dispatch Day) is subject to additional controls including in accordance with the Business Rules:
- A revised Balanced Schedule must comply with the requirements applicable to all Balanced Schedules;
 - No revised Balanced Schedule may vary from the latest accepted previous submission with respect to any interval that commences sooner, after submission of the revised Balanced Schedule, than permitted by the Tariff;

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- The SO may reject revised or new Balanced Schedules due to insufficient time for assessment of the impact of material changes in accordance with section 2.4.6 below;
- To the extent that the SO has included in a Final Day Ahead Commitment Schedule, or any later Commitment Schedule, the provision of Ancillary Services from a Generation Facility, no revised Balanced Schedule should seek to schedule additional energy output from that Generation Facility that would reduce its capability of providing the scheduled Ancillary Services;
- The SO may reject new or revised Balanced Schedules that are rejected by other affected system operators;
- The SO may reject revised Balanced Schedules if the IES is not in a normal operating state, if the SO is not satisfied that acceptance would not threaten reliability of the IES or any Zone thereof, or if insufficient time remains for the SO's assessment in accordance with section 3.4.6 below; and
- A request to withdraw a Balanced Schedule may not be submitted later than permitted by the Tariff. A request for withdrawal submitted after 3:00 p.m. Atlantic Time of the Day Ahead is subject to the same controls as a revised Balanced Schedule.

2.4.6 When the SO receives valid submission of a new or revised Balanced Schedule, or a request to withdraw a Balanced Schedule, it shall use its reasonable best efforts to complete assessments in a timely manner, and in sufficient time to allow inclusion of the submission in the Final Balanced Schedule. The level of such reasonable best efforts shall take account of workload in managing grid conditions, staff availability etc.

2.5 Timing of Balanced Schedule Submissions

2.5.1 A Balanced Schedule in respect of a given Dispatch Day may first be submitted as a Provisional Balanced Schedule at any time after 00:01 on the 45th day prior to the Dispatch Day.

2.5.2 Deadlines for the submission of new or revised Balanced Schedules are defined in the Tariff and the Business Rules, Chapter 3.

2.6 Form of Submission of Balanced Schedules

2.6.1 Except as noted in section 3.6.2 below, Balanced Schedules are to be submitted electronically using the web-based form or an equivalent file upload protocol acceptable to the SO.

2.6.2 The form to be used for fax transmission in case of system delays or failures will be provided by the SO upon request.

2.7 Validation of Balanced Schedules

2.7.1 An on-line automatic validation is carried out on data entry into a field. The pre-submission validation is initiated by the attempted submission of a form, and is carried out before the upload into the database that constitutes submission.

2.7.2 Submissions validated on line, and made before 3:00 p.m. Atlantic Time of the Day Ahead are automatically accepted by the SO, subject to check-out and to review in accordance with section 2.7.5 below.

2.7.3 Note that the acceptance by the SO of a Balanced Schedule does not imply that the submission of such a Balanced Schedule is in accordance with, or in any way satisfies, a Transmission Customer's obligations under the Business Rules.

2.7.4 If submission is after 3:00 p.m. Atlantic Time of the Day Ahead, the submission will be subject after submission to review by the SO against the criteria set out in the third and fourth bullets of section 2.4.5 above. Only when the SO has completed such review as it

- sees fit and in accordance with section 2.4.6 above, will a Balanced Schedule submission be accepted and may still be subject to additional check-out.
- 2.7.5 In its use of Balanced Schedules, after their acceptance, the SO will check for compatibility with Dispatch Data and Generation Facility capabilities. If the SO identifies discrepancies, it shall notify the Transmission Customer.
- 2.7.6 NERC e-tag data, in accordance with NERC policy, must be included in the schedule submission.
- 2.7.7 A Balanced Schedule will fail validation if the Balanced Schedule submission is incomplete with respect to e-tag data.
- 2.7.8 A Balanced Schedule may be rejected if its implementation would materially impair system reliability during ramping-in or ramping-out of the transaction.

2.8 Changes by the SO

- 2.8.1 If the SO has identified a problem in accordance with section 2.7.4 , and the SO has not accepted a revised Balanced Schedule that resolves the problem, the SO may adjust one or more Balanced Schedules. Such changes shall have effect for operations and for settlement purposes.
- 2.8.2 The SO may revise any Balanced Schedule at any time in order to give effect to Transmission Loading Relief in accordance with NERC practices, or in recognition of Control Actions taken in accordance with the EBR. Such changes shall have effect for operations and for settlement purposes.
- 2.8.3 The SO shall change Balanced Schedule energy flows in respect of changes made in non-firm schedules in accordance with section 2.2.10 above. Such changes shall have effect for operations and for settlement purposes.

- 2.8.4 Notification of status changes or modifications by the SO will be communicated by email provided the Transmission Customer has provided a notification email address. Otherwise all status changes or modifications will be indicated on the SO website.

2.90 Posting of Balanced Schedule Information

- 2.9.1 Each Balanced Schedule that has been submitted will be website accessible to the Transmission Customer that submitted it for inspection. Status information (submitted, accepted, modified by the SO, rejected) will be indicated in addition to the submitted information. The Transmission Customer will be able to download an existing Balanced Schedule as a basis for revision and re-submission.

Part 3 Transaction Types

The SO will accommodate the scheduling and delivery of transactions of various types at the request of Transmission Customers provided such accommodation is not in conflict with the Tariff, is non-discriminatory, follows good utility practice, and does not compromise reliability. Such transactions may include, but will not be limited to, Transmission Customer transactions of scheduled energy, generation capacity, dispatchable energy, and ancillary services, as well as system operator to system operator arrangements for reliability programs.